from inside the home (Fig. 5, above the garage, loc. cit.) revealed 1 trypo- and 8 epi-mastigotes when examined 310 days after capture. Another ♀ collected on 28 August 1965 showed 12 trypo- and 8 epi-mastigotes 312 days after capture. These are remarkably long survival times and show that freshly captured *Triatoma* can be stored in a household refrigerator to preserve *Trypanosoma cruzi* in the insect vector for at least 312 days.

Infection with *T. cruzi* for all California triatomes obtained by me through 1974 was 25.1% or 945 of 3,761 bugs. Most were alive when rectal contents were examined.

From Arizona, between 1966 and 1971, 24 (12 ♂, 12 ♀) *Triatoma rubida uhleri* Neiva were received. Two ♂ were positive for *T. cruzi* of 22 collected in Tucson, Pima Co., 14 June 1969 by G. Harwood. One of 2 ♀ was positive from Phoenix, Maricopa Co., collected 12 June 1970 by F. Plettenberg.

The infection rate for all Arizona triatomes examined through 1974 was 6.6% or 88 positive of 1,323 examined mostly from dead, dried specimens.—SHERWIN F. WOOD, *614 W. Shenandoah St., Thousand Oaks, CA 91360.*

Foraging Behavior of *Agapostemon* on *Oenathera caespitosa* in southeastern Wyoming (Hymenoptera: Halictidae).—Linsley, MacSwain and Raven (1963, Univ. Calif. Publs. Entomol. 33: 25–58) have provided information on the Apoideaen visitors to eleven species of *Oenothera* in and around the Great Basin. This note reports on a species previously unrecorded on *Oenothera caespitosa caespitosa* Munz and describes its foraging behavior on the blossom.

Observations were made on two small populations of *Oenothera caespitosa* on two consecutive mornings, May 26 and 27, 1974, from 5:30 to 9:30 a.m. The weather was clear, warm and without wind. The area, a slightly rocky sandstone patch surrounded by typical open short-grass prairie, is located about seven miles S. S. E. of Laramie, Wyoming. As reported previously, (ibid.) the flowers at this time of morning were devoid of nectar but did possess significant amounts of pollen.

The first activity was recorded at 8:30 on May 26 and 8:20 on May 27 when females of *Agapostemon texanus* began to appear on the flowers. A total of four bees were recorded on May 26 and ten on May 27. Typically, a bee would alight upon the proximal half of a petal and walk to the base of a filament. It would then ascend the filament to the anthers where pollen collected by the forelegs was transferred to the scopa. The pollen grains, which are large, triangular and inter-connected by viscin threads formed a rather loose and easily detachable mass on the scopa. When finished with one anther the bee flew to the next filament and repeated the process. Usually, two or three anthers were collected from on each flower. In no case did a bee forage on all four anthers of the same flower. Analysis of the pollen taken from the scopa of three bees revealed only *Oenothera* pollen. This flower constancy occurred despite the fact that several other species were in bloom and contained available pollen. Females of *Agapostemon texanus* carrying full pollen loads have been collected on these other species at other times. Of the fourteen recorded visitors none were seen contacting the stigma at any time. Thus, *Agapostemon texanus* does not seem to be

an important pollinator of *Oenothera caespitosa* and may be regarded as a pollen thief.

Although evening observations were not conducted it is probable that this flower is pollinated by nocturnal hawkmoths as previously reported (ibid.). The stigmas of all plants examined contained noticeable amounts of pollen. The early-morning oligoleges of the genus *Andrena* (*Onagrandrena*) found by Linsley, et al. (ibid.) were not present on the study site.—V. J. TEPEDINO, *Department of Zoology and Physiology, University of Wyoming, Laramie, Wyoming* 82071.

Insect Associates (Diptera: Chironomidae, Sphaeroceridae) of *Darlingtonia californica* (Sarraceniaceae) in California.—In June, 1974, I had the opportunity to study specimens of *Darlingtonia californica* Torrey, the California pitcher-plant, in Nevada County, California, near Willow Springs. The plants were growing along the stream margins at 6500 feet elevation in a sphagnum bog surrounded by pine-fir forest. In view of the presumably digestive nature of the fluids contained in the pitchers (Street, H. E. and H. Opik. 1970. The Physiology of Flowering Plants: Their Growth and Development. American Elsevier Publishing Co.: New York, N. Y. 263 pp.), it was of interest to find two species of dipterous larvae living and developing in the upper layer of reddish fluid above the insect debris in the pitchers. One species was a chironomid midge, apparently *Metriocnemus edwardsi* Jones, the other a sphaerocerid in the genus *Leptocera*. I am indebted to Dr. E. I. Schlinger of the University of California, Berkeley, for his identification of the flies.

The chironomid larvae were abundant in 15–20 pitchers examined in the field. They appear to be detritus feeders, but may be herbivores. The larvae stayed near the top of the detritus. Jones found *M. edwardsi* larvae eating insect remains in plants in Siskiyou County, California, and reported that in captivity specimens pupated on the outside of the pitcher, on the basal portion of the leaf or on adjacent moss (Jones, F. M. 1916. Entomol. News 27: 385–392). Jones was convinced, by the presence of larvae in almost every suitable *Darlingtonia* leaf, that the larvae were habitually and possibly exclusively associated with it. To my knowledge, *M. edwardsi* has never been reported from any host other than *D. californica*, nor from outside California, although the plant occurs in Oregon. Because of the uniqueness of the habitat utilized, it seems quite unlikely that the same species of chironomid would be found in other aquatic situations in the same area. Although there are 17 described species of *Metriocnemus* in North America, *M. edwardsi* is the only one as yet described from California. The rest are northern in distribution.

The *Leptocera* larvae were more numerous than the chironomids. These crawl up the walls of the pitchers, and pupate among the retrorse hairs found in the lower portion of the tube. Adult *Leptocera* were also found in the pitchers. Some are probably caught by spiders, such as the eriogonids found in some of the atria at the tops of the plants, while others escape and colonize new pitchers. Various species of *Leptocera* are commonly found among low plants in this type of boggy area. This particular species has apparently been able to adapt completely to the conditions in the pitchers, and is probably limited to *Darlingtonia*.